

16/17MCA34

Phird Semester MCA Degree Examination, June/July 2019
Software Engineering

Time: 3 hrs.

Max. Marks: 80

Note: Answer FIVE full questions, choosing ONE full question from each module.

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1	a.	What is Software Engineering? Explain the attributes of good software.	(06 Marks)
	b.	What are the key challenges facing software engineering?	(05 Marks)
	c.	What are the basic principles of agile software development?	(05 Marks)

### OR

2	a.	Explain the waterfall model with its merits and demerits.	(08 Marks)
	b.	Explain extreme programming in detail.	(08 Marks)

# Module-2

3	a.	What is requirement engineering? Explain functional and non-functional require	ments.
	٠.,		(08 Marks)
	h	Explain the general structure of a requirements document suggested by IEEE.	(08 Marks)

#### OR

4	a.	Explain the requirements elicitation and analysis process with a neat diagram.	(08 Marks)
	b.	What is CBSE? Explain the basic elements of component model.	(08 Marks)

## Module-3

5	a.	Explain the four types of system models.	(08 Marks)
		Explain the following: i) Class diagram	(08 Marks)

#### OR

6	a.	Briefly explain the four architectural views.	(08 Marks)
	b.	Explain architectural styles of Component and Connectors (CC) in b	rief. (08 Marks)

## Module-4

7	a.	What are the most important design issu	ues that have to	be considered in	distributed systems
		engineering? Explain.			(08 Marks)
	b.	Discuss in detail Software as a Service.			(08 Marks)

# OR

	Illustrate Multi-Tier Client-Server architectures.	(08 Marks)
b.	Briefly discuss about coupling and cohesion.	(08 Marks)

## Module-5

- 9 a. What is black box testing? Explain about equivalence partitioning and boundary value analysis. (08 Marks)
  - b. What is white box testing? Explain control flow based criteria and data flow based testing.
    (08 Marks)

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10	a.	What is Risk Management? Briefly explain the Risk Management activities.	(08 Marks)
			(00 Maulea)

b. Discuss about project scheduling and staffing. (08 Marks)

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